

# INTERNATIONAL SEARCH REPORT

International application No.  
PCT/CA2004/002004

## A. CLASSIFICATION OF SUBJECT MATTER

IPC7: C12N 15/31, A61K 39/118, A61K 31/7088, A61P 31/04, C07H 21/00, C07K 14/295, C07K 16/12, C12P 21/02  
According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC7: C12N 15/31, A61K 39/118, A61K 31/7088, A61P 31/04, C07H 21/00, C07K 14/295, C07K 16/12, C12P 21/02

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic database(s) consulted during the international search (name of database(s) and, where practicable, search terms used)

GenBank; GeneSeq; PIR - SEQ ID Nos:1-8

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

| Category* | Citation of document, with indication, where appropriate, of the relevant passages   | Relevant to claim No(s). |
|-----------|--|--------------------------|
| X         | WO 02 062380 A2 (SMITHKLINE BEECHAM BIOLOGICALS)<br>15 August 2002 (2002-08-15)<br>whole document, especially abstract, and pages 6 & 22                 | 1-38                     |
| X         | WO 02 08267 A2 (CORIXA CORPORATION)<br>31 January 2002 (2002-01-31)<br>whole document, especially SEQ ID Nos: 417 & 441, abstract,<br>and claims 34 & 39 | 1-38                     |
| X         | WO 03 049762 A2 (CHIRON SPA)<br>19 June 2003 (2003-06-19)<br>whole document, especially SEQ ID Nos: 125 & 126, abstract,<br>pages 9-31, and example 7    | 1-38                     |

☒ Further documents are listed in the continuation of Box C.

☒ See patent family annex.

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| * Special categories of cited documents :<br>"A" document defining the general state of the art which is not considered to be of particular relevance<br>"E" earlier application or patent but published on or after the international filing date<br>"I" document which may throw doubt on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)<br>"O" document referring to an oral disclosure, use, exhibition or other means<br>"P" document published prior to the international filing date but later than the priority date claimed | "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention<br>"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone<br>"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art<br>"&" document member of the same patent family |
|--|--|

Date of the actual completion of the international search

3 February 2005 (03-02-2005)

Date of mailing of the international search report

17 March 2005 (17-03-2005)

Name and mailing address of the ISA/CA  
Canadian Intellectual Property Office  
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## C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

| Category* | Citation of document, with indication, where appropriate, of the relevant passages  | Relevant to claim No(s).   |
|-----------|---|----------------------------|
| X         | WO 02 14516 A1 (QUEENSLAND UNIVERSITY OF TECHNOLOGY)<br>21 February 2002 (2002-02-21)<br>whole document, especially SEQ ID Nos: 23 & 24, abstract, and<br>claims 102, 106, 110 & 117  | 1-3, 20-31, 33, 34-36 & 38 |
| X         | GenBank™ Database, Accession No:AE001317 <i>Chlamydia trachomatis</i> D/UW-3/CX<br>section 44 of 87 of the complete genome (AE001273).<br>20 July 1998 (1998-07-20)   | 1, 2, 3, 23, 30 & 31       |
| X         | GenBank™ Database, Accession No:AE002341 <i>Chlamydia muridarum</i> section 69 of<br>85 of the complete genome (AE002160)<br>7 March 2000 (2000-03-07)  | 1, 2, 3, 23, 30 & 31       |
| X         | DE LA MAZA LM ET AL: "Sequence Diversity of the 60-Kilodalton Protein and of a<br>Putative 15-Kilodalton Protein between the Trachoma and Lymphogranuloma<br>Venereum Biovars of <i>Chlamydia trachomatis</i> "<br>INFECTION AND IMMUNITY, Vol. 59, No. 3, March 1991, pages 1196-1201<br>ISSN: 0019-9567<br>whole document         | 1, 2, 3, 23, 30 & 31       |
| X         | MILLMAN KL ET AL: "Recombination in the <i>ompA</i> Gene but Not the <i>omcB</i> Gene of<br><i>Chlamydia</i> Contributes to Serovar-Specific Differences in Tissue Tropism,<br>Immune Surveillance, and Persistence of the Organism"<br>JOURNAL OF BACTERIOLOGY, October 2001, pages 5997-6008<br>ISSN: 0021-9193<br>whole document | 1, 2, 23, 30 & 31          |
| A         | READ TD ET AL: "Genome Sequences of <i>Chlamydia trachomatis</i> MoPn and<br><i>Chlamydia Pneumoniae</i> AR39"<br>NUCLEIC ACIDS RESEARCH, Vol. 28, No. 6, 15 March 2000 (2000-03-15),<br>pages 1397-1406<br>ISSN :1362-4962   |                            |
| A         | STEPHENS RS ET AL: "Genome Sequence of an Obligate Intracellular Pathogen of<br>Humans: <i>Chlamydia trachomatis</i> "<br>SCIENCE, Vol. 282, 23 October 1998 (1998-10-23), pages 754-759<br>ISSN: 0036-8075   |                            |
| A         | WO 99 28475 A2 (GENSET)<br>10 June 1999 (1999-06-10)  |                            |

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### Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 of the first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons :

1. ☒ Claim Nos. : 16-19 and 38

because they relate to subject matter not required to be searched by this Authority, namely :

Although claims 16-19 and 38 are directed to methods of treatment of the human/animal body which this Authority is not obliged to search under Rule 39.1(iv) of the PCT, the search has been carried out based on the alleged effects of the compounds referred to therein.

2. ☐ Claim Nos. :

because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically :

3. ☐ Claim Nos. :

because they are dependant claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

### Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows :

1. ☐ As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claim Nos. :
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claim Nos. :

**Remark on Protest** ☐ The additional search fees were accompanied by the applicant's protest.

☐ No protest accompanied the payment of additional search fees.

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## Information on patent family members

| Patent Document<br>Cited in Search Report | Publication<br>Date | Patent Family<br>Member(s) | Publication<br>Date |
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| Patent Document<br>Cited in Search Report | Publication<br>Date | Patent Family<br>Member(s) | Publication<br>Date |
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